GRASS AND FORB SEED SOURCE REQUIREMENTS

BACKGROUND

Plants that grow over broad geographic areas are comprised of many different ecotypes (cultivars). Individual ecotypes are adapted to specific soil and site conditions (water tolerance (flooding, water table), drought tolerance, growing season, precipitation, day length, etc.). Plant characteristics, including area of adaptability, are inherited and genetically transferred traits. For example, warm season grasses from northern latitudes initiate growth and produce seed over a relatively short growing season, and produce plants that grow and mature rapidly regardless of where the seed is planted. Northern ecotypes, moved more than 150 miles south of their origin, also produce less vegetative growth and may break dormancy too soon. Seed from plants moved from the west to more humid areas of the state are more susceptible to disease than local ecotypes, and those moved from the east to west are not as adapted to drought. Southern ecotypes, if planted more than 250 miles north of their origin, mature later, generally fail to produce viable seed and are subject to winter injury.

Grass and forb species recommended will be based on the appropriate FOTG practice standard and the purpose of the planting. Refer to Table 2 "Pure Live Seeding Calculations" for a list of grass and forb species which includes the seeds/pound of individual species for determining seeding rates or the current year seedlist spreadsheet available on http://www.ne.nrcs.usda.gov (click on technical resources).

DEFINITIONS OF GRASS SEEDLOTS

Certified Grass Seedlots Blue Tag Only (Certified Grass Seed)

Includes grass seedlots certified and for varietal identity and genetic purity. To be certified, grass seedlots must also meet minimum standards for purity, viability, and weed seed content through the Nebraska Crop Improvement Association or official certification entities in other states. Each container has a blue label stating certification, lot number, and variety name. In order to be certified an audit trail must exist that proves the seed was produced from a field planted to Registered, Foundation, or other seed stock eligible to be certified seed. Certification is void without an official label. When a grass seedlot is certified, customers are assured of high quality grass seed that is genetically pure and has been tested for specific desirable traits such as forage quality and quantity or other desirable traits.

Non-Certified Grass Seedlots (Non-certified Grass Seed)

Includes all grass seedlots that are not certified, even if a variety name is stated on the seed analysis tag (label). Without an exception or variance, all non-certified Warm Season grass seed (regardless of whether a variety is stated or not) must meet mileage requirements. The Nebraska Crop Improvement Association (NCIA) or similar entities in other states do not issue blue labels, do not inspect production fields or verify the genetic purity or quality of non-certified grass seed. However, the Nebraska State Seed Law and the Federal Seed Act are both "truth in labeling laws" which require that all seed labeling (i.e. variety stated) and other information to be accurate and truthful. Labeling such as variety stated on non-certified grass seedlots, or other information that is not truthful or accurate is subject to enforcement under one or both of these.

Source Identified Class Grass Seedlots (Yellow Tag)

Includes grass seedlots that have a documented origin and ensures the Genus and Species is accurate. Verifies that only natural selection and that no artificial breeding and selection for traits have taken place. Source identified seed provides assurance of purity and quality of seed and is ideal for the purpose of prairie restorations when planting into similar environmental conditions within a limited distance from the original collection site.

REQUIREMENTS FOR USE OF IMPROVED VARIETIES

The advantage in using improved varieties is that they are predictably superior in vigor, production, and in some cases more resistant to disease within its area of adaptation. Most varieties have a wider area of adaptation (broader genetic base) than common/native/VNS harvest grass seed. Varieties will be selected based on adaptability and traits desired for the intended purpose (i.e. for forage purposes utilize the best varieties for forage, for wildlife purposes utilize the best varieties for targeted wildlife species).

Certified varieties of grasses will be suited for the site per Nebraska Cooperative Extension publication EC90-120, "Certified Perennial Grass Varieties Recommended for Nebraska". This document is available at http://www.ne.nrcs.usda.gov (click on EFOTG, Section II, Statewide Interpretations, Pasture and Hayland Interpretations). This document is not all inclusive of varieties adapted within Nebraska, but is intended to include those that are best suited for Nebraska conditions (refer to exceptions for utilizing varieties not listed in this guide). Refer to the appropriate practice standard and specification in Section IV of the Field Office Technical Guide, to determine additional limitations, recommendations or restrictions of species/varieties, if any.

REQUIREMENTS FOR USE OF CERTIFIED GRASS SEEDLOTS

Certified grass seedlots of improved varieties have no mileage limitations and can be utilized in grass seedings regardless of the origin. Varieties must be adapted to the site and climate according to the guidance in this guide.

Certified Warm and Cool Season Grasses with appropriate Variety

No mileage limits

REQUIREMENTS FOR USE OF NON-CERTIFIED AND SOURCE IDENTIFIED GRASS SEEDLOTS

When varieties are recommended certified grass seedlots of improved varieties will be used whenever possible. Non-certified grass seedlots with a variety stated on the label must be within the mileage requirements listed below. Non-certified grass seed without a variety stated or source identified grass seed that are within the mileage restrictions below, can be utilized only when improved varieties are not available. For the purpose of prairie restorations Source Identified Seed, or "Native harvest" grass seed within the mileage listed below is preferred. Refer to the appropriate practice standard and specification in Section IV of the Field Office Technical Guide, to determine additional limitations or restrictions of species/varieties or class of seed, if any. State and county of origin must be identified on all non-certified Warm Season grass seed in order to certify that mileage restrictions are met.

Mileage restrictions for non-certified grass seed are as follows:

Warm Season Grass

Warm Season Grass Seedlots with appropriate variety stated on the seedtag:

- South 350 miles (southern sources should be given preference over seed from northern sources.)
- North 250 miles
- East or West 300 miles

Warm Season Grass Seedlots without a Variety Stated on the seedtag (includes source identified, VNS, Native Harvest, Common, etc.):

- South 250 miles (southern sources should be given preference over seed from northern sources.)
- North 150 miles
- East or West 200 miles

Cool Season Grasses

Cool Season Grass Seedlots with Variety Stated on the seedtag:

No mileage limits.

Cool Season Grass Seedlots without a Variety Stated on the seedtag:

 Must come from Nebraska, or a state adjacent to Nebraska (South Dakota, Iowa, Missouri, Kansas, Colorado or Wyoming), and no further than 250 miles north of the planting site.

EXCEPTIONS TO SEED SOURCE REQUIREMENTS (listed above)

The State Conservationist and/or designee may approve a variance granting an exception for mileage restrictions of non-certified seedlots, and/or grass varieties found in Nebraska Cooperative Extension publication EC90-120, "Certified Perennial Grass Varieties Recommended for Nebraska". Exceptions may be granted annually or on a case by case situation through a variance granted by the State Conservationist/designee or for use in field trials.

Normal exceptions include the following:

Use of non-certified seedlots of Needle-and-thread and Prairie junegrass beyond the mileage restrictions listed above are allowed when the seed source is from Nebraska, Kansas, Colorado, South Dakota, North Dakota, Montana, Idaho, Wyoming, or from sites greater than 2000 feet in elevation from the states of New Mexico, Utah, and the high plains region of Texas or Oklahoma.

Special exceptions include the following:

Field Office Level Variances

Use of Non-Certified Warm Season Grass with a variety stated beyond the mileage requirements listed above:

When Warm Season grass seed that meets the requirements listed above is not available (after the client has checked with several seed dealers) the client shall contact the local NRCS office for other acceptable varieties/species, or to request a variance for extending the mileage limitations for non-certified warm season grass seedlots with a variety stated. If a variance is warranted, the local NRCS office will provide the seed dealer a NE-CPA-44 "GROWERS DECLARATION" and the grass seed grower/dealer must complete it and return it prior to filling the seed order, in order to verify background information on the genetic purity of the variety. If the background information is acceptable the grass seedlot may be utilized for the planting.

Use of Varieties not listed in Variety Guide:

Local variances for varieties that are appropriate for the specific purpose(s) of a given grass seeding and are not listed on Nebraska Cooperative Extension publication EC90-120, "Certified Perennial Grass Varieties Recommended for Nebraska" may be utilized in grass seedings when appropriate background information is documented. Background information that supports the use of the variety must be included in the casefile. A copy of this will be provided to the State Resource Conservationist and placed in the casefile with the grass seeding jobsheet. Background information that must be documented includes the source of seed, intended use/purpose of the variety, adaptability to plant hardiness zones and land resource region (climate), adaptability to soils and other site conditions on the planting site, adaptability to irrigation If appropriate, suitability to the purpose of the planting (i.e. forage, wildlife, erosion control, etc.), longevity of the variety, information on where the variety has been utilized on similar sites/purposes successfully, and other appropriate background information.

FORB SEED REQUIREMENTS

Legume/forb species and varieties MUST be adapted to the climate, site/county, and be consistent with the intended use of the forb (i.e. forage quality, bloat tolerance, wildlife use, longevity, etc.). Native forbs utilized for prairie restorations or Standard 643 Restoration of Declining Habitats can not come from outside the continental United States, unless the native forb seed is a certified seedlot of an improved variety that is approved prior to use and adapted to the site. Legumes must be inoculated for forage uses and other purpose when necessary. It is important that the correct inoculate be used for each legume species for sufficient nodule formation and that the seed be planted shortly after being treated (if too long of time passes after treatment the inoculate is not effective).

Background information on forb cultivars/varieties must support the purpose of the planting. If necessary, species, seed and/or variety background information will be obtained from the seed vendor and/or specified on the seed specifications to ensure this. For guidance on adaptability of native forbs refer to Table 2 "Pure Live Seeding Rates/MLRA Adaptation" or the appropriate practice standard.

REQUIREMENTS FOR SEED LABELING AND QUALITY

All requirements according to Nebraska Seed Law and Federal Seed Law must be adhered to for all seedings. It is unlawful for any person to sell, offer for sale, expose for sale, or transport for sale any agricultural seed within Nebraska unless they have a current Nebraska seed labeler's permit and, there is a current test for germination, purity and a statement of any noxious weed seeds present. No seed with primary or prohibited noxious weed seed can be marketed or utilized in seedings (contact the Nebraska Department of Agriculture for a list of these species). In addition, seed must be labeled in accordance with the provisions of the Nebraska Seed Law and shall not have false or misleading labeling, advertisements, statements, invoices, or declarations. The Federal Seed Act and Nebraska Seed Law state the following.

Federal Seed Act: "It shall be unlawful for any person to transport or deliver for transportation in interstate commerce--any agricultural or vegetable seed unless the test to determine the percentage of germination required by this section shall have been completed within a five month period, exclusive of the calendar month in which the test was completed, prior to transportation or delivery for transportation in interstate commerce." Note: The five month window allows seed labelers additional time to legally sell the seed after crossing state lines, based on Nebraska's 9 or 12 month testing limit (refer to Nebraska Seed Law). It would not be feasible for the Federal Act to have a 9 or 12-month testing period since the seed would be in violation of most state laws soon after it entered the state.

Nebraska Seed Law: The timeframe for germination tests in Nebraska are as follows: All warm and cool season grasses - 12 months, exclusive of the month tested. Species covered under this requirement are listed in section 005.02 of the State Seed Regulations in the Nebraska Seed Law. All other agricultural seed i.e. field crops, small grains, legumes, millets - 9 months, exclusive of the month tested. Wildflowers (native forbs), Flowers and Vegetables - 9 months, exclusive of the month tested. Note: Since many of these CRP mixtures could have both native grasses, legumes, and wildflowers, some individual species in the mixtures would have 9 month dates and others 12 month dates.

A copy of current analysis of germination, purity and noxious weed seeds and verification of test date must be furnished regardless of who grows or sells the seed (The seed vendor must provide a copy of this along with a completed grass jobsheet). This includes all classes of grass seed including hand collected or seed harvested from that contains multiple species.

For additional information on truth in labeling refer to definitions of grass seedlots.

POLICY FOR SEED SOURCE DOCUMENTATION FROM VENDORS AND CERTIFICATION OF EVIDENCE OF PERFORMANCE (Refer to NE-CPA-8 Grass Seeding Jobsheet)

<u>Section I "Performance Required"</u> on the NE-CPA-8 Grass Seeding Jobsheet will be completed thoroughly by the designer. Additional information such as copies of pages from the Nebraska Herbicide Guide, detailed step by step procedures to properly prepare a site for planting or other design information will be attached as needed.

<u>Section II "Evidence of Performance</u> on the NE-CPA-8 Grass Seeding Jobsheet will be completed by the seeding contractor or customer (whoever completed the seeding components). Specific items of performance (i.e. type of grass drill, specific herbicides and rates, site preparation etc.) and date completed must be self-certified before the seeding can be certified.

Backside of the Grass Seeding Jobsheet (Seed Information)

Seed vendors must provide adequate information to ensure that all state and federal seed laws are adhered to for seed labeling and quality (listed above). Specific information that is needed from the vendor includes seedlot number, verification that noxious weeds are not present, lot number, purity and germination, bulk seed provided, whether the seed is certified or not, and variety information. Vendors must also provide county and state of origin for all non-certified Warm Season grass seed and Cool Season grass seed without a variety stated on the seedtag.

The following statement will be provided to seed customers on the back of the NE-CPA-8 "Grass Seeding Sheet" to ensure that local variances are granted only when appropriate.

"When grass seed that meets the requirements listed above is not available, check with other seed dealers to obtain grass seed that meets these requirements. After checking with other seed dealers, and grass seed that meets these requirements is not available, contact your local NRCS office for other acceptable grass varieties/species.

If desired grass seed is not available, a variance for use of other adaptable varieties, or to request extend mileage limitations can be requested. If a variance is warranted, for non-certified Warm Season grass seedlots with a variety stated the local NRCS office will provide the seed dealer a <u>Grower's Declaration</u>." The grass seed grower/dealer must complete it in order to verify specific quality requirements in order to qualify for a variance.

Seed source requirements such as mileage restrictions, preferred class of seed to meet purpose(s) of the planting, varieties and other pertinent information will be provided to the customer. Refer to Example NE-CPA-8 Grass Seeding Jobsheets for more information.